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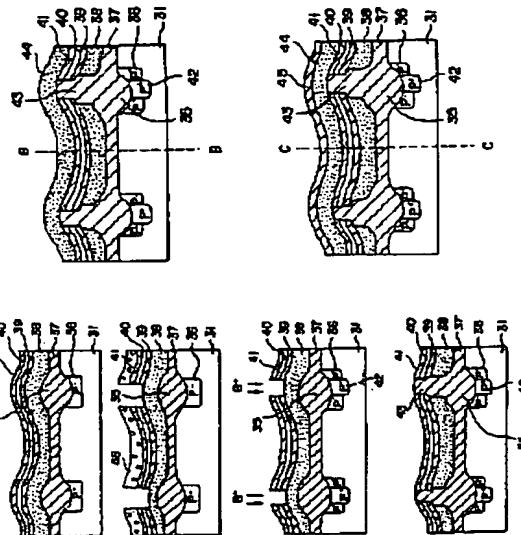
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TITLE : MANUFACTURE OF NONVOLATILE
MEMORY ELEMENT



ABSTRACT : PURPOSE: To lengthen effective active region width and shorten active region width and control length so as to reduce a cell by thinning the concentration in the vicinity of an N-channel region, keeping the P-type impurity concentration at the part below a control gate, when forming the P-type impurity diffusion layer of a channel stopper.

CONSTITUTION: The patterning of a silicon nitride film 41, a silicon nitride film 40, and a polysilicon oxide film 39 is performed by photolithography so as to expose one part of the surface of polysilicon 38, and then with a photoresist 46 as a mask, B⁺ ions are implanted by dosage of approximately 1E14cm⁻² at accelerating energy of 140Kev so as to form a P-type diffusion layer 42 in high concentration at the part 36 of a P-type impurity diffusion layer under an element isolation area. Thermal oxidation is performed, and finally an element isolating oxidation film 43 is created.

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